

PLATE 1011, *X. SOLIDAGO HIRTIPES* Fernald, all figs. from TYPE: FIG. 1, portion of plant,  $\times \frac{1}{3}$ ; FIG. 2, pedicelled heads,  $\times 5$ ; FIG. 3, pedicels,  $\times 10$ ; FIG. 4, upper, and FIG. 5, lower surface of leaf,  $\times 10$ .

PLATE 1012, *S. GRAMINIFOLIA* (L.) Salisb., var. *NUTTALLII* (Greene) Fernald and *S. MICROCEPHALA* (Greene) Bush. FIGS. 1-3, *S. GRAMINIFOLIA*, var. *NUTTALLII*, all from near Alexandria, Virginia, *Blake*, no. 8697: FIG. 1, glomerules,  $\times 5$ ; FIG. 2, branchlet and pedicel,  $\times 10$ ; FIG. 3, lower surface of leaf,  $\times 10$ . FIGS. 4, 5 and 6, *S. MICROCEPHALA*, all from the type-region, Sumter Co., Georgia, *Harper*, no. 636: FIG. 4, pedicelled heads,  $\times 5$ ; FIG. 5, branchlet and pedicels,  $\times 10$ ; FIG. 6, upper surface of leaf,  $\times 10$ .

PLATE 1013, *XANTHIUM CHASEI* Fernald and *X. STRUMARIUM* L. FIG. 1, *X. CHASEI*, TYPE,  $\times \frac{3}{7}$ . FIGS. 2 and 3, *X. STRUMARIUM*: FIG. 2, bur,  $\times 2$ , from Bavaria, *Killermann*, in *Herb. Exsic. Bavar.*, no. 1226; FIG. 3, same bur,  $\times 5$ .

PLATE 1014, *X. CHASEI* Fernald: FIG. 1, portion of TYPE,  $\times 1$ ; FIG. 2, bur,  $\times 2$ , from TYPE; FIG. 3, portion of bur, to show beaks and bulbous-based prickles,  $\times 5$ , from TYPE; FIG. 4, bur,  $\times 2$ , from *V. H. Chase*, no. 3474; FIG. 5, summit of bur,  $\times 5$ , from no. 3474.

PLATE 1015, burs,  $\times 2$ , and beaks,  $\times 5$ , of *X. GLOBOSUM* Shull, *X. ITALICUM* Moretti, *X. INFLEXUM* Mackenzie & Bush and *X. CHINENSE* Miller. FIGS. 1 and 2, *X. GLOBOSUM*, from plant raised by Sherff from seed of TYPE. FIGS. 3 and 4, *X. ITALICUM*, from Venetia, *Béguinot* in *Fl. Italica Exsicc.*, no. 2774. FIGS. 5 and 6, *X. INFLEXUM*, from Courtney, Missouri, *Bush*, no. 1806. FIGS. 7 and 8, *X. CHINENSE*, from Ogdensburg, New York, *Phelps*, no. 1215.

PLATE 1016, burs of *X. CURVESCENS* Millspaugh & Sherff and *X. LEPTOCARPUM* Millspaugh & Sherff, smaller figs.  $\times 2$ , larger,  $\times 5$ . FIGS. 1-4, *X. CURVESCENS*: FIGS. 1 and 2, from TYPE; FIGS. 3 and 4, from Burlington, Vermont, Sept. 8, 1918, *N. F. Flynn* (identification by *Sherff*). FIGS. 5 and 6, *X. LEPTOCARPUM*, from TYPE.

PLATE 1017, burs of *X. ORIENTALE* L., figs. 1, 3, 5 and 7,  $\times 2$ , others  $\times 5$ ; FIGS. 1 and 2, from Austria, *Fritsch* in *Fl. Exsic. Austro-Hung.*, no. 3068; FIGS. 3 and 4 (2 burs), from France (as *X. macrocarpum* DC.), ex *Herb. Cosson-Germain*; FIGS. 5 and 6, from Richelieu River, St. Hilaire, Quebec, *Pease*, no. 12,955; FIGS. 7 and 8, from LaTortue, Quebec, *Victorin*, no. 21,254.

PLATE 1018, *X. ECHINATUM* Murray: FIG. 1, fruiting branch,  $\times 1$ , from Revere, Massachusetts, Sept. 17, 1882, *Herbert A. Young*; FIG. 2, margin of large leaf,  $\times 1$ , from Marshfield, Massachusetts, August 28, 1898, *C. H. Morss*; FIG. 3, bur, with arching beaks,  $\times 2$ , from Tisbury, Massachusetts, *F. C. Seymour*, no. 2029; FIG. 4, summit of bur,  $\times 5$ , from no. 2029; FIG. 5, bur, with tightly crossing beaks,  $\times 2$ , from Newcastle, New Hampshire, Sept. 19, 1901, *E. F. Williams*; FIG. 6, summit,  $\times 5$ , of same bur as in fig. 5.

PLATE 1019, *X. VARIANS* Greene: FIG. 1, portion of ISOTYPE,  $\times 1$ ; FIG. 2, bur,  $\times 2$ , from The Dalles, Oregon, *Suksdorf*, no. 193; FIG. 3, summit of bur,  $\times 5$ , from no. 193.

PLATE 1020, *HELIANTHUS ATRORUBENS* L., var. *ALSODES* Fernald, all figs. from TYPE: FIG. 1, plant,  $\times \frac{3}{8}$ ; FIG. 2, pubescence of base and petioles,  $\times 2$ ; FIG. 3, involucre,  $\times 2$ .

PREVIOUSLY UNREPORTED PLANTS FROM MINNESOTA.—*POA TRIVIALIS* L. Several years ago Dr. C. O. Rosendahl collected *P. trivialis* growing in association with *P. sylvestris* Gray and *Milium effusum* L., in northeast Iowa, less than one mile from the Iowa-Minnesota state line. It appears to be the closest known station to that of Duluth. On July 19, 1945, the writer discovered the species on the bank of Tischer Creek at the foot of

Hunters Hill. Collection no. 6007 was made from a colony growing in wet moss in deep shade under willows, not far from a colony of *Listera auriculata* Wieg., a rare orchid in Minnesota. *P. trivialis* is an interesting addition to the adventive flora established on the higher slopes of Hunters Hill, e. g. *P. Chaixii*, *P. nemoralis*, *Milium effusum* and *Luzula nemorosa*.

HELENIUM NUDIFLORUM Nutt. is extending its range farther into the interior west from Michigan and north from Missouri. In Minnesota the writer discovered a colony of the species on Highway 23, about two miles south of the Holyoke Junction, in Carlton Co. Collection Lakela no. 5860 was made on Sept. 4, 1944, from a colony of scattered individual plants growing in shallow moss-mats with species of *Juncus* and *Carex*, along a partly cleared border of the roadside thicket.

EQUISETUM ARVENSE L., f. CAMPESTRE (C. F. Schultz) Klinge was discovered in water-filled depressions made by removal of sod, in a brookside-meadow northwest of Woodland Ave. in Duluth. Specimens no. 5985 collected June 23, 1945, have more chlorophyll-containing tissue in fertile stems than later formed plants. Strobili continued to develop through August. The writer is obliged to Dr. R. M. Tryon, Jr., University of Minnesota, for determination of the form.—OLGA LAKELA, Duluth State Teachers College.

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### BIDENS HYPERBOREA VAR. TYPICA

NORMAN C. FASSETT

*Bidens hyperborea* was described in 1901<sup>1</sup> from material collected at Rupert House, James Bay, by J. M. Macoun in 1885, and its specific identity with plants on estuaries from the St. Lawrence to New England was later demonstrated.<sup>2</sup>

“The treatment of this variable species by the present writer (1925c)<sup>3</sup> can be regarded only as tentative. Var. *typica* Fassett came from Rupert House, James Bay, Canada, and is described as being simple and monocephalous, with entire or few-toothed leaves. Plants matching this description were collected by Svenson and Fassett on the estuary of the Restigouche River,

<sup>1</sup> Greene, *Pittonia* iv. 257 (1901).

<sup>2</sup> Fernald, *RHODORA* xx. 146-150 (1918).

<sup>3</sup> Fassett, *RHODORA* xxvii. 166-171 (1925).